

# Notice of Allowability

Application No.

09/691,629

Examiner

Michael N. Opsasnick

Applicant(s)

JENSEN ET AL.

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## -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 4/26/07.
2. ☒ The allowed claim(s) is/are 1,3-7,9-14 and 16-24.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
  1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

*M. N. Opsasnick*  
Primary Examiner  
M. N. Opsasnick

### **DETAILED ACTION**

#### ***Priority***

1. Proper priority and support has been established in the aforementioned 09/615726 (the '726 application). Examiner notes that the 35 US 112 1<sup>st</sup> rejection has been overcome since the issue of priority and incorporation by reference has been resolved.

### **EXAMINER'S AMENDMENT**

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr Ariel Rogson on 4/24/07 (and fax on 4/26/07).

The application has been amended as follows:

In the specification, at page 10, line 7, insert:

-- The above-described embodiments of the invention can be implemented as software stored on a computer readable medium. The program can then be operated on a computer to execute the software. --

In the claims, in claim 7, lines 1-2:

Replace “containing a program” with – storing a computer program—

In the claims, in claim 7, line 4:

Replace “comprising” with – implementing –

In the claims, in claim 7, line 5:

Delete “software to store a”

In the claims, in claim 7, line 7:

Replace “identification software to identify” with – identifying –

In the claims, in claim 7, line 10:

Replace “selection software to select” with – selecting –

In the claims, in claim 7, line 12:

Replace “identification software to identify” with – identifying –

In the claims, in claim 7, line 14:

Replace “measurement software to measure” with – measuring –

In the claims, in claim 7, line 16:

Replace “construction software to construct” with – constructing –

In the claims, in claim 7, line 19:

Delete “software to superposition”

In the claims, in claim 9, lines 1:

Replace “program” with – computer-readable medium—

In the claims, in claim 9, lines 2-3:

Replace “wherein the superpositioning software includes addition software to add the state vectors using vector arithmetic” with –wherein superpositioning the state vectors includes the state vectors using vector arithmetic.—

In the claims, in claim 10:

Replace “A program according to claim 7, wherein the superpositioning software includes weighting software to weigh the state vectors” with – A computer-readable medium according to claim 7, wherein superpositioning the state vectors includes weighing the state vectors.—

In the claims, in claim 11:

Replace “A program according to claim 7, the program further comprising normalization software to normalize the single vector” with – A computer-readable medium according to claim 7, the program further implementing normalizing the single vector. –

In the claims, in claim 12:

Replace “A program according to claim 7, wherein: the storing software includes: storing software to store the document in computer memory accessible by the computer system; and extraction software to extract words from at least a portion of the document; the construction software includes construction software to construct a state vector in the topological vector space for each word using the dictionary and the basis; and the program further comprises filtering software to filter the state vectors.”

With

– A computer-readable medium according to claim 7, wherein: storing a semantic content includes: storing the document in computer memory accessible by the computer system; and extracting words from at least a portion of the document; constructing state vectors includes constructing a state vector in the topological vector space for each word using the dictionary and the basis; and the program further implements filtering the state vectors. –

In the claims, in claim 20, lines 1:

Replace “containing a program” with – storing a program—

In the claims, in claim 20, line 4:

Replace “comprising” with – implementing –

In the claims, in claim 20, line 5:

Delete “software to store a”

In the claims, in claim 20, line 7:

Replace “identification software to identify” with – identifying –

In the claims, in claim 20, line 10:

Replace “section software to select” with – selecting –

In the claims, in claim 20, line 12:

Replace “identification software to identify” with – identifying –

In the claims, in claim 20, line 14:

Replace “measurement software to measure” with – measuring –

In the claims, in claim 20, line 16:

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Replace “construction software to construct” with – constructing –

In the claims, in claim 20, line 19:

Replace “clump location software to locate” with – locating –

In the claims, in claim 20, line 21:

Delete “software to superposition”

In the claims, in claim 20, line 23:

Replace “collecting software to collect” with - collecting –

In the claims, in claim 20, line 25:

Delete “software to store”

***Allowable Subject Matter***

3. Claims 1,3-7,9-14,16-21 are allowed.

4. The following is an examiner’s statement of reasons for allowance:

As per the independent claims, the claim recitations pertaining to identifying a maximal element to a concept, and a chain from the maximal element to every concept; and constructing state vectors in the topological vector space for the semantic content using the measures of relationship between lexemes/lexeme phrase in each chain in the dictionary is not explicitly taught by the prior art of record.

A representative prior art, Gillis (6523026), teaches semantic representation (col. 1 lines 10-22; as a semantic representation -- fig. 4) storing the semantic document (col. 40 lines 52-

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62); constructing term vectors (col. 41 lines 15-25); adding the vectors into one (col. 41 lines 22-26); and storing the abstract representations (abstract). However, Gillis (6523026), does not explicitly teach the relationship between the semantic content vector space and the lexeme phrases. Furthermore, it would not have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of the prior art of record to obtain the recited limitations of the independent claims as noted above.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Opsasnick, telephone number (571)272-7623, who is available Tuesday-Thursday, 9am-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Richemond Dorvil, can be reached at (571)272-7602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

mno



primary examiner

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